

CLAIMS

I claim:

1. An apparatus comprising

an image projection lighting device comprising:

a base;

a yoke;

a lamp housing;

the lamp housing comprising

a lamp,

and a first light valve;

and a variable homogenizing system.

2. The apparatus of claim 1

wherein the variable homogenizing system homogenizes the light projected by the lamp across the light valve.

3. The apparatus of claim 2

wherein the variable homogenizing system can vary the light across the light valve from an existing state to a first state.

4. The apparatus of claim 3

wherein the variable homogenizing system can vary the light across the light valve from the existing state to a second state.

5. The apparatus of claim 3 wherein

the variable homogenizing system is comprised of one or more lens arrays.

6. The apparatus of claim 5 wherein

at least one of the one or more lens arrays is comprised of a plurality of cylindrical lenses.

7. The apparatus of claim 5 wherein

at least one of the one or more lens arrays is comprised of a plurality of spherical lenses.

8. The apparatus of claim 3 further comprising

a communications port;

wherein the communications port can receive a command to vary the variable homogenizing system from the existing state into the first state.

9. The apparatus of claim 3 further comprising

a stand-alone control system;

wherein the stand-alone control system can receive a command to vary the variable homogenizing system from the existing state into the first state.

10. An apparatus comprising

an image projection lighting device comprising:

a communications port;

a processor;

a memory;

a base;

a yoke;

a lamp housing;

the lamp housing comprising

a lamp,

and a first light valve;

and a variable homogenizing system;

wherein the communications port can receive a first operating address and wherein the first operating address can be compared to a second operating address contained in the memory of the image projection lighting device;

wherein the communications port can receive a command to vary the variable homogenizing system; from an existing state to a first state.

11. The apparatus of claim 10

wherein the variable homogenizing system varies the uniformity of the light projected by the lamp across the light valve.

12. The apparatus of claim 11 further comprising

an actuator and

wherein the variable homogenizing system is varied by an actuator.

13. The apparatus of claim 12 further comprising

a motor control system and

wherein the actuator is varied by signals sent by the motor control system.

14. The apparatus of claim 10 wherein

the variable homogenizing system is comprised of two different lens types.

15. A lighting system comprising

a plurality of image projection lighting devices;

and a central controller;

wherein each of the image projection lighting devices comprises:

a base;

a yoke;

a communications port;

a lamp housing comprising:

a lamp;

and a light valve; and

each of the image projection lighting devices further comprising

a processing system;

a memory;

and a device for creating variable uniformity of light intensity across the light valve;

wherein each of the plurality of image projection lighting devices may have a uniformity of light intensity across its light valve varied independently by a command received over the communications port from the central controller.

16. The lighting system of claim 15

wherein the variable uniformity of light intensity across the light valve is created by a variable homogenizing system and the variable homogenizing system can vary the light intensity across the light valve from an existing state to a first state.

17. The lighting system of claim 16 wherein

the variable homogenizing system is comprised of a first and a second type of lens.

18. The lighting system of claim 17 wherein

the first type of lens is cylindrical;

the second type of lens is spherical.

19. A method comprising

varying a homogeneity of light projected by a lamp of an image projection lighting device across a light valve;

wherein the homogeneity can be varied from an existing state to a first state.

20. The method of claim 19 further comprising

varying light across the light valve from the existing state to a second state.

21. The method of claim 19 wherein

the light is homogenized by one or more lens arrays.

22. The method of claim 21 wherein

at least one of the one or more lens arrays is comprised of a plurality of cylindrical lenses.

23. The method of claim 21 wherein

at least one of the one or more lens arrays is comprised of a plurality of spherical lenses.

24. The method of claim 19 further comprising

receiving a command at a communications port of the image projection lighting device to vary the light across the light valve from the existing state to the first state.

25. A method comprising the steps of

receiving a first operating address at a communications port of an image projection lighting device;

comparing the first operating address to a second operating address contained in memory of the image projection lighting device;

receiving a command at the communications port to vary a variable homogenizing system,

variably homogenizing light projected from the image projection lighting device, from an existing state to a first state.

26. The method of claim 25 further comprising the step of

varying the uniformity of light projected by a lamp of the image projection lighting device across a light valve of the image projection lighting device.

27. The method of claim 26 wherein

the step of variably homogenizing light projected from the image projection lighting device is implemented by an actuator.

28. The method of claim 27 further wherein

the actuator functions in response to signals sent by a motor control system.

29. The method of claim 25 wherein

light is variably homogenized by using two different lens types.

30. A method comprising

varying a first uniformity of light intensity across a first light valve of a first image projection lighting device in response to a command received over a first communications port from a central controller; and

varying a second uniformity of light intensity across a second light valve of a second image projection lighting device in response to a command received over a second communications portion from the central controller.